

MEMORANDUM | 21 December 2006

TO Edward Maillett, Division of Economics, USFWS
FROM Industrial Economics, Incorporated (IEc)
SUBJECT Estimated Economic Impacts of Conservation Efforts in Designated Critical Habitat for the Canada Lynx

SUMMARY OF FINDINGS

The purpose of this memorandum is to provide information on the coextensive economic impacts of potential Canada lynx conservation efforts within or affecting areas included in the final critical habitat designation, as described in the Final Rule.¹

The November 2006 Final Economic Analysis of Proposed Critical Habitat Designation for the Canada Lynx (FEA) describes coextensive economic impacts associated with proposed critical habitat as described in the Proposed Rule.² The geographic scope of the November FEA is consistent with the proposed habitat as described in the Proposed Rule, and does not reflect changes made to the critical habitat areas in the Final Rule. This memorandum summarizes the coextensive economic impacts of conservation efforts in those areas identified as final critical habitat in the Final Rule.

The Final Rule designates three areas as critical habitat:

- Voyageurs National Park in Minnesota;
- portions of Glacier National Park in Montana; and
- portions of North Cascades National Park (including Lake Chelan National Recreation Area (NRA)) in Washington.

All other lands considered for critical habitat designation were excluded in the final rule. Details of the geographic scope of the final critical habitat and reasons for exclusions are described in detail in the Final Rule.

The present value high-end economic impact of lynx conservation in the final critical habitat area is \$7.15 million (assuming a seven percent discount rate), or an annualized impact of \$675,000 as summarized in Exhibit 1 and detailed in the remainder of this memorandum.

¹ U.S. Fish and Wildlife Service, Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Contiguous United States Distinct Population Segment of the Canada Lynx; Final Rule, published in the *Federal Register* on November 9, 2006, Vol. 71, No. 217.

² U.S. Fish and Wildlife Service, Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Contiguous United States Distinct Population Segment of the Canada Lynx; Final Rule, published in the *Federal Register* on November 9, 2005, Vol. 70, No. 216.

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EXHIBIT 1 TOTAL POST-DESIGNATION IMPACTS OF LYNX CONSERVATION IN FINAL CRITICAL HABITAT AREAS (2006-2025)

SUBUNIT	UNDISCOUNTED		PRESENT VALUE 3%		PRESENT VALUE 7%		ANNUALIZED 3%		ANNUALIZED 7%	
	Low	High	Low	High	Low	High	Low	High	Low	High
Unit 2										
Voyageurs National Park	\$1,100,000	\$1,110,000	\$995,000	\$1,000,000	\$885,000	\$890,000	\$66,900	\$67,400	\$83,500	\$84,000
Unit 3										
Glacier National Park	\$6,720,000	\$6,970,000	\$6,070,000	\$6,260,000	\$5,410,000	\$5,560,000	\$408,000	\$421,000	\$511,000	\$524,000
Unit 4										
North Cascades National Park	\$550,000	\$550,000	\$476,000	\$476,000	\$401,000	\$401,000	\$32,000	\$32,000	\$37,900	\$37,900
Lake Chelan NRA	\$433,000	\$433,000	\$367,000	\$367,000	\$302,000	\$302,000	\$24,700	\$24,700	\$28,500	\$28,500
Total Post-Designation Impacts	\$8,800,000	\$9,060,000	\$7,910,000	\$8,110,000	\$7,000,000	\$7,150,000	\$532,000	\$545,000	\$661,000	\$675,000

ECONOMIC IMPACTS IN FINAL CRITICAL HABITAT BY SUBUNIT

The following describes the nature of the coextensive costs associated with Canada lynx conservation efforts in areas designated as critical habitat in the Final Rule. Details of these conservation efforts are provided in the FEA.

UNIT 2- VOYAGEURS NATIONAL PARK

Final critical habitat Unit 2 is Voyageurs National Park. Impacts associated with lynx conservation efforts include:

- Development of lynx management plan;
- Research related to lynx distribution and habitat;
- Consumer surplus losses associated with increased congestion on existing snowmobile trails; and
- Administrative costs associated with section 7 consultations.

UNIT 3-GLACIER NATIONAL PARK

Final critical habitat Unit 3 comprises lands in Glacier National Park above 4,000 feet on the west side of the Continental Divide and to the Park borders east of the Continental Divide. Impacts associated with lynx conservation efforts include:

- Development of lynx management plan;
- Snowshoe hare (lynx prey) research;
- Modifications to forecast transportation projects;
- Modifications to forecast U.S. Army Corps of Engineers 404 and 401-permitted projects; and
- Administrative costs associated with section 7 consultations.

UNIT 4- NORTH CASCADES NATIONAL PARK (LAKE CHELAN RECREATION AREA INCLUDED)

Final critical habitat Unit 4 comprises lands in North Cascades National Park above 4,000 feet, east of Cascade Crest, including the Lake Chelan NRA. Impacts associated with lynx conservation efforts include:

- Development of lynx management plan; and
- Administrative costs associated with Section 7 consultations.

Exhibit 3 highlights the final critical habitat area, as well as areas proposed for critical habitat that were excluded in the final rule.

EXHIBIT 3: FINAL CRITICAL HABITAT DESIGNATION FOR THE CANADA LYNX, NOVEMBER 2006

